

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2015 Levee Inspection Results****Reclamation District No. 0524 Middle Roberts Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2015 Levee Inspection Results

Reclamation District No. 0524 Middle Roberts Island

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.20
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	04/21/2015 - 04/21/2015			
DWR Inspector	Richard Willoughby			
Accompanied By	Mario Jaques RD 524			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.00	Rating **	U	Issue No.	121
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals				°
					°
DWR ID	DWR_RD0524_01_s _ 2012_121				
Action/Comments					
Inspector Comments: The LMA does not have a copy of the O&M Manual on file.					

No Photos

LM Start	0.00	Rating **	M	Issue No.	123		
LM End	0.00	Issue Type +	Ma	Location *	N/A		
Category	Earthen Levee			GPS Latitude/Longitude			
				Start		End	
Item	Flood Preparedness & Training				°		°
					°		°
DWR ID	DWR_RD0524_01_s _ 2012_123						
Action/Comments							
Inspector Comments: No recent training.							

No Photos

LM Start	0.00	Rating **	M	Issue No.	138
LM End	0.00	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment				°
					°
DWR ID	DWR_RD0524_01_s _ 2013_138				
Action/Comments					
Inspector Comments: The LMA does not appear to have emergency supplies or equipment.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.19	Rating **	U	Issue No.	129
LM End	0.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.939085 °	37.939085 °
				-121.343917 °	-121.343917 °
DWR ID	DWR_RD0524_01_s_2015_129				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2014 Site ID:RD0524U01RM40.85]					

Photo 1 of 1 : SP_2015_RD0524_107_129_20150309_00129.jpg



Close view of the erosion.

LM Start	0.21	Rating **	M	Issue No.	3
LM End	0.21	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.938890 °	37.938890 °
				-121.343657 °	-121.343657 °
DWR ID	DWR_RD0524_01_s_2012_3				
Action/Comments					
Repair depressions or ruts in the crown or slope. Inspector Comments: No change in status.					

Photo 1 of 3 : SP_2015_RD0524_107_3_20150309_00006.jpg



Looking west at 3" depression on levee crown. (Spring 2012)

LM Start	0.21	Rating **	M	Issue No.	3 (cont)
LM End	0.21	Issue Type +	Ma	Location *	CR

Photo 2 of 3 : SP_2015_RD0524_107_3_20150309_00007.jpg



Looking west at depression on levee crown near waterward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.21	Rating **	M	Issue No.	3 (cont)
LM End	0.21	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.938890 °	37.938890 °
				-121.343657 °	-121.343657 °
DWR ID	DWR_RD0524_01_s_2012_3				
Action/Comments					
Repair depressions or ruts in the crown or slope.					
Inspector Comments: No change in status.					

Photo 3 of 3 : SP_2015_RD0524_107_3_20150309_00008.jpg



Looking east at 3" depression on levee crown. (Spring 2012)

LM Start	0.27	Rating **	U	Issue No.	179
LM End	0.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.938438 °	37.938438 °
				-121.342883 °	-121.342883 °
DWR ID	DWR_RD0524_01_s_2014_179				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 2 : SP_2015_RD0524_107_179_20150424_00204.jpg



Looking north at untrimmed tree on waterward slope. (Spring 2015)

LM Start	0.27	Rating **	U	Issue No.	179 (cont)
LM End	0.27	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_179_20150309_00146.jpg



Looking south at untrimmed tree on waterward slope. (Fall 2014)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.30	Rating **	U	Issue No.	174
LM End	0.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.938382 °	37.938382 °
				-121.342352 °	-121.342352 °
DWR ID	DWR_RD0524_01_f_2014_174				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comments: Several rodent holes present at this site.					

Photo 1 of 2 : SP_2015_RD0524_107_174_20150424_00205.jpg



Looking west at several rodent holes on waterward shoulder. (Spring 2015)

LM Start	0.30	Rating **	U	Issue No.	174 (cont)
LM End	0.30	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_174_20150309_00144.jpg



Looking southeast at several rodent holes on waterward slope.

LM Start	0.34	Rating **	M	Issue No.	180
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938461 °	37.938461 °
				-121.341626 °	-121.341626 °
DWR ID	DWR_RD0524_01_s_2014_180				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion is located along the lower level of waterward slope.					

Photo 1 of 2 : SP_2015_RD0524_107_180_20150309_00147.jpg



Looking southeast at erosion on waterward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.34	Rating **	M	Issue No.	180 (cont)	
LM End	0.34	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.938461 °	37.938461 °	
				-121.341626 °	-121.341626 °	
DWR ID	DWR_RD0524_01_s_2014_180					
Action/Comments						
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion is located along the lower level of waterward slope.						

Photo 2 of 2 : SP_2015_RD0524_107_180_20150309_00148.jpg



Looking northeast at erosion on waterward toe.

LM Start	0.40	Rating **	U	Issue No.	131
LM End	0.40	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938870 °	37.938870 °
				-121.340460 °	-121.340460 °
DWR ID	DWR_RD0524_01_s_2015_131				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 8/7/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation. [2014 Site ID:RD0524U01RM40.99] 4/21/2015 Site repaired.					

Photo 1 of 2 : SP_2015_RD0524_107_131_20150424_00206.jpg



Looking east at repaired site.

LM Start	0.40	Rating **	U	Issue No.	131 (cont)
LM End	0.40	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_131_20150309_00130.jpg



Front view of the erosion site. Note the vegetation at the levee toe and lower slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.41	Rating **	M	Issue No.	170
LM End	0.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938628 °	37.938015 °
				-121.340385 °	-121.336165 °
DWR ID	DWR_RD0524_01_s_2015_170				
Action/Comments					
Repair slope instability. Inspector Comments: Several slope instabilities within this reach.					

Photo 1 of 2 : SP_2015_RD0524_107_170_20150424_00207.jpg



Looking south at slope damage on waterward shoulder.

LM Start	0.41	Rating **	M	Issue No.	170 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_170_20150424_00208.jpg



Looking west at waterward slope erosion.

LM Start	0.62	Rating **	M	Issue No.	11
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.938278 °	37.938247 °
				-121.336524 °	-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_11				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

Photo 1 of 3 : SP_2015_RD0524_107_11_20150309_00013.jpg



Looking southeast at bamboo on waterside slope. (Spring 2012)

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.62	Rating **	M	Issue No.	11 (cont)
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.938278 °	37.938247 °
				-121.336524 °	-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_11				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

Photo 2 of 3 : SP_2015_RD0524_107_11_20150309_00014.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013)

Photo 3 of 3 : SP_2015_RD0524_107_11_20150309_00015.jpg



Looking south at bamboo on waterside slope. (Fall Inspection 2012)

LM Start	0.63	Rating **	M	Issue No.	10
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938247 °	37.938247 °
				-121.336503 °	-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_10				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					

Photo 1 of 1 : SP_2015_RD0524_107_10_20150309_00012.jpg



Looking east at waterside erosion appears to be caused by runoff.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.64	Rating **	M	Issue No.	13
LM End	0.65	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105 °	37.938023 °
				-121.336288 °	-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13				
Action/Comments					
Repair slope instability.					
Inspector Comments: Erosion extends from mid levee slope to shoulder.					

Photo 1 of 3 : SP_2015_RD0524_107_13_20150309_00017.jpg



View of the erosion.

LM Start	0.64	Rating **	M	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2015_RD0524_107_13_20150309_00018.jpg



Looking south at erosion on waterside shoulder.

LM Start	0.64	Rating **	M	Issue No.	13 (cont)
LM End	0.65	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2015_RD0524_107_13_20150309_00019.jpg



Update view of the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.67	Rating **	M	Issue No.	14
LM End	0.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.937808 °	37.937808 °
				-121.335913 °	-121.335913 °
DWR ID	DWR_RD0524_01_s_2012_14				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

Photo 1 of 3 : SP_2015_RD0524_107_14_20150309_00020.jpg



Looking southeast at bamboo on waterside shoulder as of 4/2010.

Photo 2 of 3 : SP_2015_RD0524_107_14_20150309_00021.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013)

Photo 3 of 3 : SP_2015_RD0524_107_14_20150309_00022.jpg



Looking south at bamboo on waterside slope. (Fall 2012)

LM Start	0.67	Rating **	M	Issue No.	14 (cont)
LM End	0.67	Issue Type +	Ma	Location *	WS

LM Start	0.67	Rating **	M	Issue No.	14 (cont)
LM End	0.67	Issue Type +	Ma	Location *	WS

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.67	Rating **	M	Issue No.	934
LM End	0.67	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.937891 °	37.937891 °
				-121.335939 °	-121.335939 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:17563					
DS_ID:20592					
EP_NO: 6035					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Flows from primer tank causing erosion on LS slope.					

No Photos

LM Start	0.75	Rating **	M	Issue No.	935
LM End	0.75	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.936951 °	37.936951 °
				-121.335132 °	-121.335132 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:41463 DS_ID:20595 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Appears abandoned and should be done so properly. FIELD_STRUCT_DESC: 2.5-inch telephone conduit through levee 2.0 feet below crown and under the channel. Conduit visible on WS shoulder. FS Date: 08/16/2013					

No Photos

LM Start	0.76	Rating **	U	Issue No.	132
LM End	0.76	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.936821 °	37.936821 °
				-121.334582 °	-121.334582 °
DWR ID	DWR_RD0524_01_s_2015_132				
Action/Comments					
Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. No significant change observed. 08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line blocks the view of erosion. [2014 Site ID:RD0524U01RM41.39]					

Photo 1 of 1 : SP_2015_RD0524_107_132_20150309_00131.jpg



Front view of the erosion site. Vegetation is visible.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.77	Rating **	M	Issue No.	262
LM End	0.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.936555 °	37.936555 °
				-121.334847 °	-121.334847 °
DWR ID	DWR_RD0524_01_s _ 2012_262				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Dense vegetation at landside toe along fence line.					

Photo 1 of 2 : SP_2015_RD0524_107_262_20150309_00155.jpg



Looking southwest at vegetation on landward slope and toe. (Spring 2013)

LM Start	0.77	Rating **	M	Issue No.	262 (cont)
LM End	0.77	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_262_20150309_00156.jpg



Looking west at dense vegetation on landside toe.

LM Start	0.78	Rating **	M	Issue No.	76
LM End	0.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.936444 °	37.936444 °
				-121.334797 °	-121.334797 °
DWR ID	DWR_RD0524_01_s _ 2012_76				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_76_20150309_00088.jpg



Looking southwest at low hanging tree branches at landside toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.79	Rating **	M	Issue No.	936
LM End	0.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.936474 °	37.936474 °
				-121.334830 °	-121.334830 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:17571 DS_ID:20596 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Large hole in pipe at WS toe. Appears abandoned and should be done so properly. FIELD_STRUCT_DESC: 8-inch steel drain pipe through the levee 4.0 feet below the crown. Pump at the toe of the landward slope (not found 8/16/13). Siphon breaker in 24-inch cmp Riser on the waterward slope. Originally included in the 1964 O&M manual. FS Date: 08/16/2013					

LM Start	0.81	Rating **	U	Issue No.	2
LM End	0.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °
				-121.334648 °	-121.334615 °
DWR ID	DWR_RD0524_01_f_2013_2				

Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several holes and finger erosions on landward slope.					

Photo 1 of 5 : SP_2015_RD0524_107_2_20150309_00001.jpg



Looking southwest at hole on landward shoulder.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

Levee Inspection Report By Mile - Spring 2015

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °
				-121.334648 °	-121.334615 °
DWR ID	DWR_RD0524_01_f_2013_2				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Several holes and finger erosions on landward slope.					

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

LM Start	0.81	Rating **	U	Issue No.	2 (cont)
LM End	0.81	Issue Type +	Ma	Location *	LS

A photograph showing a large, dark, irregular hole in a sandy, eroded bank. The hole is surrounded by loose sand and small rocks, suggesting it might be a burrow or a tunnel entrance. The surrounding area is a mix of sand and gravel, with some sparse vegetation visible in the background.

Looking east at erosion on landward slope.

* Location	** Rating	+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable A/W : Acceptable but Monitor & Maintain	En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.81	Rating **	U	Issue No.	2 (cont)	
LM End	0.81	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Erosion / Bank Caving			37.936093 °	37.936004 °	
				-121.334648 °	-121.334615 °	
DWR ID	DWR_RD0524_01_f_2013_2					
Action/Comments						
Schedule repair of erosion site prior to the next inspection.						
Inspector Comments: Several holes and finger erosions on landward slope.						

Photo 5 of 5 : SP_2015_RD0524_107_2_20150309_00005.jpg



Looking northeast at several finger erosion on landward slope.

LM Start	0.83	Rating **	U	Issue No.	133
LM End	0.83	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935930 °	37.935930 °
				-121.334133 °	-121.334133 °
DWR ID	DWR_RD0524_01_s_2015_133				
Action/Comments					
Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2014 Site ID:RD0524U01RM41.44]					

Photo 1 of 1 : SP_2015_RD0524_107_133_20150309_00132.jpg



Close view of the site. Dense vegetation covers the erosion.

LM Start	0.91	Rating **	U	Issue No.	134
LM End	0.91	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935576 °	37.935576 °
				-121.333202 °	-121.333202 °
DWR ID	DWR_RD0524_01_s_2015_134				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. No significant change observed 08/23/2011: The erosion site is immediately downstream of the riprap protection. [2014 Site ID:RD0524U01RM41.5]					

Photo 1 of 1 : SP_2015_RD0524_107_134_20150309_00133.jpg



Front view of the erosion. Note the riprap protection near the site.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.92	Rating **	M	Issue No.	122
LM End	0.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.935267 °	37.935267 °
				-121.332985 °	-121.332985 °
DWR ID	DWR_RD0524_01_s _ 2013_122				
Action/Comments					
Pipe					
Inspector Comments: Inch and half metal pipe should be removed.					

Photo 1 of 1 : SP_2015_RD0524_107_122_20150309_00124.jpg



Looking northwest at inch and half metal pipe on waterward slope.

LM Start	0.93	Rating **	M	Issue No.	77
LM End	1.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935259 °	37.935049 °
				-121.332864 °	-121.331334 °
DWR ID	DWR_RD0524_01_s _ 2012_77				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_77_20150309_00089.jpg



Looking south at low hanging tree branches at landside toe.

LM Start	0.96	Rating **	A/W	Issue No.	20
LM End	0.96	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935181 °	37.935181 °
				-121.332297 °	-121.332297 °
DWR ID	DWR_RD0524_01_f _ 2013_20				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	0.98	Rating **	M	Issue No.	937
LM End	0.98	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.935178 °	37.935178 °
				-121.332029 °	-121.332029 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22724					
DS_ID:20597					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Pipe abandoned and should be done so properly.					
FIELD_STRUCT_DESC: *Abandoned* 14-inch pipe through the levee					
6.0 feet below the crown. Concrete pad for pump on WS shoulder. No					
pump or other appurtances remain. Originally included in the 1964					
O&M manual.					
FS Date: 08/16/2013					

No Photos

LM Start	1.00	Rating **	U	Issue No.	135
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID	DWR_RD0524_01_s_2015_135				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The erosion was discovered during the boat survey. [2014 Site ID:RD0524U01RM41.58]					

Photo 1 of 1 : SP_2015_RD0524_107_135_20150309_00134.jpg



Close view of the erosion.

LM Start	1.00	Rating **	M	Issue No.	17
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.935098 °	37.935018 °
				-121.331645 °	-121.331248 °
DWR ID	DWR_RD0524_01_s_2012_17				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Minor erosion was noted next to repaired site.					

Photo 1 of 3 : SP_2015_RD0524_107_17_20150309_00023.jpg



Looking upstream (south) at erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.00	Rating **	M	Issue No.	17 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.935098 °	37.935018 °
				-121.331645 °	-121.331248 °
DWR ID	DWR_RD0524_01_s_2012_17				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Minor erosion was noted next to repaired site.					

Photo 2 of 3 : SP_2015_RD0524_107_17_20150309_00024.jpg



Looking southeast at erosion next to repaired site on waterward slope (Spring 2013)

LM Start	1.00	Rating **	M	Issue No.	17 (cont)
LM End	1.02	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2015_RD0524_107_17_20150309_00025.jpg



Looking north at erosion site next to repaired site. (Spring 2012)

LM Start	1.00	Rating **	U	Issue No.	139
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935326 °	37.935326 °
				-121.331537 °	-121.331537 °
DWR ID	DWR_RD0524_01_s _ 2015_139				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site. 08/23/2011: The site is about 500 ft downstream of bridge. The levee					

Photo 1 of 1 : SP_2015_RD0524_107_139_20150309_00136.jpg



Front view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.08	Rating **	M	Issue No.	938
LM End	1.08	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.934778 °	37.934778 °
				-121.330460 °	-121.330460 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:18703 DS_ID:20600 EP_NO: 2725B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Given amount of rust on adjacent CMP riser, it may be appropriate to do a video inspection of this pipe. FIELD_STRUCT_DESC: 36-inch concrete encased pipe through levee 11.5 feet below crown. Pump in pump house on the landward side. Flap gate on the waterward end. Two concrete cutoff walls. Siphon breaker in 8-inch CMP riser unit on the landward slope (Permit No. 2725B, 1959). Included in the 1964 O&M manual. FS Date: 08/16/2013					

LM Start	1.08	Rating **	M	Issue No.	18
LM End	1.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934645 °	37.934645 °
				-121.330310 °	-121.330310 °
DWR ID	DWR_RD0524_01_s _ 2012_18				
Action/Comments					
Repair slope instability. Inspector Comments: Slope damage extend from shoulder to middle of slope.					

Photo 1 of 6 : SP_2015_RD0524_107_18_20150424_00209.jpg



Looking south at caving on landward shoulder. (Spring 2015)

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.08	Rating **	M	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934645 °	37.934645 °
				-121.330310 °	-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18				
Action/Comments					
Repair slope instability. Inspector Comments: Slope damage extend from shoulder to middle of slope.					

Photo 2 of 6 : SP_2015_RD0524_107_18_20150309_00026.jpg



Landward slope damage.

LM Start	1.08	Rating **	M	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS

Photo 3 of 6 : SP_2015_RD0524_107_18_20150309_00027.jpg



Updated picture of the erosion site on the landside shoulder.

LM Start	1.08	Rating **	M	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS

Photo 4 of 6 : SP_2015_RD0524_107_18_20150309_00028.jpg



Looking south at caving on landside shoulder. (Spring 2012)

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.08	Rating **	M	Issue No.	18 (cont)	
LM End	1.08	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			37.934645 °		37.934645 °
				-121.330310 °		-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18					
Action/Comments						
Repair slope instability. Inspector Comments: Slope damage extend from shoulder to middle of slope.						



Looking at updated slope stability as of 4/2010.

LM Start	1.08	Rating **	M	Issue No.	18 (cont)
LM End	1.08	Issue Type +	Ma	Location *	LS



Updated view from above the slope stability.

LM Start	1.08	Rating **	M	Issue No.	939
LM End	1.08	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.934750 °	37.934750 °
				-121.330405 °	-121.330405 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:17589					
DS_ID:20601					
EP_NO: 2725B					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: CMP riser severely corroded. Good indicator of					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.12	Rating **	M	Issue No.	171
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.934225 °	37.933815 °
				-121.329693 °	-121.329242 °
DWR ID	DWR_RD0524_01_s_2015_171				
Action/Comments					
Prunings					
Inspector Comments: Prunings left on waterward shoulder and slope.					

Photo 1 of 1 : SP_2015_RD0524_107_171_20150424_00210.jpg



Looking south at prunings on waterward shoulders.

LM Start	1.13	Rating **	A/W	Issue No.	175
LM End	1.13	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934171 °	37.934171 °
				-121.329584 °	-121.329584 °
DWR ID	DWR_RD0524_01_f_2014_175				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	1.13	Rating **	M	Issue No.	19
LM End	1.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934118 °	37.933775 °
				-121.329657 °	-121.329305 °
DWR ID	DWR_RD0524_01_s_2012_19				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_19_20150309_00031.jpg



Looking northwest at low hanging tree branches at waterside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.16	Rating **	M	Issue No.	915
LM End	1.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.933775 °	37.932784 °
				-121.329250 °	-121.328765 °
DWR ID	DWR_RD0524_01_s_2012_915				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 1 : SP_2015_RD0524_107_915_20150309_00164.jpg



Looking southwest at dense veg. on landside toe.

LM Start	1.19	Rating **	U	Issue No.	141
LM End	1.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.933347 °	37.933347 °
				-121.329110 °	-121.329110 °
DWR ID	DWR_RD0524_01_s_2015_141				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. No significant change observed 08/23/2011: No significant change observed on site. 9/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank. 9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe. 10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2014 Site ID:RD0524U01RM41.79]					

Photo 1 of 1 : SP_2015_RD0524_107_141_20150309_00137.jpg



Direct view of the site.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.25	Rating **	U	Issue No.	263
LM End	1.25	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.932533 °	37.932533 °
				-121.328650 °	-121.328650 °
DWR ID	DWR_RD0524_01_s _ 2012_263				
Action/Comments					
Ramp					
Inspector Comments: Unauthorized ramps on landside slope. Ramps were caused by vehicle traffic.					

Photo 1 of 2 : SP_2015_RD0524_107_263_20150309_00157.jpg



Looking northwest at unauthorized ramp on landside slope.

Photo 2 of 2 : SP_2015_RD0524_107_263_20150309_00158.jpg



Looking south at unauthorized ramp on landside slope.

LM Start	1.30	Rating **	M	Issue No.	33
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.931948 °	37.931948 °
				-121.328387 °	-121.328387 °
DWR ID	DWR_RD0524_01_s _ 2012_33				
Action/Comments					
Pipe Inspector Comments: Pipe is not in use and should be properly abandoned.					

Photo 1 of 2 : SP_2015_RD0524_107_33_20150309_00046.jpg



Looking west at pipe on landside slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.30	Rating **	M	Issue No.	33 (cont)	
LM End	1.30	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			37.931948 °	37.931948 °	
				-121.328387 °	-121.328387 °	
DWR ID	DWR_RD0524_01_s_2012_33					
Action/Comments						
Pipe						
Inspector Comments: Pipe is not in use and should be properly abandoned.						

Photo 2 of 2 : SP_2015_RD0524_107_33_20150309_00047.jpg



Looking north at broken pipe.

LM Start	1.30	Rating **	U	Issue No.	142
LM End	1.30	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931858 °
				-121.328300 °	-121.328300 °
DWR ID	DWR_RD0524_01_s_2015_142				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: New signs of animal activity were found. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM41.92]					

Photo 1 of 1 : SP_2015_RD0524_107_142_20150309_00138.jpg



Front view of the erosion. Note the drainage pipe on the site.

LM Start	1.31	Rating **	U	Issue No.	940
LM End	1.31	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.931977 °	37.931977 °
				-121.328401 °	-121.328401 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:41271					
DS_ID:20602					
EP_NO: N/A					
Repair Type: Urgent					
Crossing Status: Found					
UCIP Comments: Pipe appears to be open on both ends. Abandoned and should be done so properly.					
FIELD_STRUCT_DESC: *Abandoned* 12-inch pipe through levee 3.5 feet below crown. Open on both ends. Originally included in the 1964 O&M manual.					
FS Date: 08/16/2013					

No Photos

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.32	Rating **	M	Issue No.	130
LM End	1.36	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931658 °	37.931085 °
				-121.328255 °	-121.328112 °
DWR ID	DWR_RD0524_01_s _ 2013_130				
Action/Comments					
Add appropriate gravel or road base. Grade and compact.					

No Photos

LM Start	1.35	Rating **	U	Issue No.	172
LM End	1.40	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931143 °	37.930517 °
				-121.328097 °	-121.328072 °
DWR ID	DWR_RD0524_01_s _ 2015_172				
Action/Comments					
Repair depressions or ruts in the crown or slope. Inspector Comments: Levee crown depression several inches below original crown elevation. Section should be survey to determine proper elevation.					

Photo 1 of 2 : SP_2015_RD0524_107_172_20150424_00211.jpg



Looking east at depression on levee crown.

LM Start	1.35	Rating **	U	Issue No.	172 (cont)
LM End	1.40	Issue Type +	Ma	Location *	CR

Photo 2 of 2 : SP_2015_RD0524_107_172_20150424_00212.jpg



Looking southeast at depression on levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.39	Rating **	U	Issue No.	143
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID	DWR_RD0524_01_s _ 2015_143				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge. [2014 Site ID:RD0524U01RM42.03]					

Photo 1 of 1 : SP_2015_RD0524_107_143_20150309_00139.jpg



Front view of the erosion.

LM Start	1.46	Rating **	U	Issue No.	144
LM End	1.46	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.929650 °	37.929650 °
				-121.328110 °	-121.328110 °
DWR ID	DWR_RD0524_01_s _ 2015_144				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2014 Site ID:RD0524U01RM42.09]					

Photo 1 of 1 : SP_2015_RD0524_107_144_20150309_00140.jpg



Front view of the erosion site.

LM Start	1.49	Rating **	M	Issue No.	916
LM End	1.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.929118 °	37.929118 °
				-121.328368 °	-121.328368 °
DWR ID	DWR_RD0524_01_s _ 2012_916				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 3 : SP_2015_RD0524_107_916_20150309_00165.jpg



Dense vegetation on landside toe.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

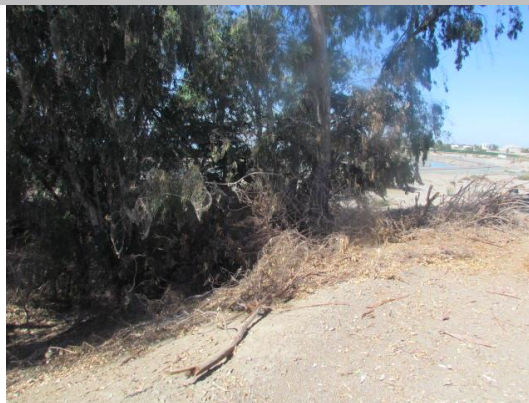
Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.49	Rating **	M	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.929118 °	37.929118 °
				-121.328368 °	-121.328368 °
DWR ID	DWR_RD0524_01_s _ 2012_916				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 2 of 3 : SP_2015_RD0524_107_916_20150309_00166.jpg



Looking south at trees on landside slope. (Fall 2012)

LM Start	1.49	Rating **	M	Issue No.	916 (cont)
LM End	1.49	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : SP_2015_RD0524_107_916_20150309_00167.jpg



Looking south at dense veg. on landside slope and toe.

LM Start	1.55	Rating **	A/W	Issue No.	23
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s _ 2012_23				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 5 : SP_2015_RD0524_107_23_20150309_00034.jpg



Overgrown landscaping on landward slope from LM 1.56 to 1.74

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s_2012_23				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.59	Issue Type +	Ma	Location *	LS

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.59	Issue Type +	Ma	Location *	LS

Photo 2 of 5 : SP_2015_RD0524_107_23_20150309_00035.jpg



Looking north from landward berm at corrected site.

Photo 3 of 5 : SP_2015_RD0524_107_23_20150309_00036.jpg



Looking east from landward berm at corrected site.

Photo 4 of 5 : SP_2015_RD0524_107_23_20150309_00037.jpg



Looking south from levee crown at corrected site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s_2012_23				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 5 of 5 : SP_2015_RD0524_107_23_20150309_00038.jpg



Looking south from levee crown at upstream end of corrected site.

LM Start	1.56	Rating **	M	Issue No.	941
LM End	1.56	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.928429 °	37.928429 °
				-121.328297 °	-121.328297 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:17798					
DS_ID:20605					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: No permit identified for this crossing.					
FIELD_STRUCT_DESC: Fiber optics cable crossing. USAA marker flags over crown along alignment of gate.					
FS Date: 08/20/2013					

No Photos

LM Start	1.58	Rating **	U	Issue No.	173
LM End	1.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927975 °	37.927975 °
				-121.328088 °	-121.328088 °
DWR ID	DWR_RD0524_01_s_2015_173				
Action/Comments					
Trim trees to at least five feet above ground level. Inspector Comments: Tree is located on landward shoulder and crown should be removed.					

Photo 1 of 1 : SP_2015_RD0524_107_173_20150424_00213.jpg



Looking northwest at tree on within levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.59	Rating **	U	Issue No.	145
LM End	1.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.927770 °	37.927770 °
				-121.327870 °	-121.327870 °
DWR ID	DWR_RD0524_01_s _ 2015_145				

Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: : The site has been visited by boat survey. No significant change observed 08/23/2011: No significant change observed on site. Trees concerned still in place. 09/07/2010: No significant change observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection. 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2014 Site ID:RD0524U01RM42.2]					

Photo 1 of 1 : SP_2015_RD0524_107_145_20150309_00141.jpg



Front view of the site where undermining has occurred.

LM Start	1.59	Rating **	M	Issue No.	136
LM End	1.59	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.927775 °	37.927775 °
				-121.327860 °	-121.327860 °

Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible. Inspector Comments: Waterward shoulder caving.					

Photo 1 of 1 : SP_2015_RD0524_107_136_20150309_00135.jpg



Looking south at depression on levee crown near waterward shoulder.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.60	Rating **	M	Issue No.	24
LM End	1.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_24				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Vegetation blocking landward toe.					

Photo 1 of 2 : SP_2015_RD0524_107_24_20150309_00039.jpg



Looking south at vegetation blocking view of landward toe.

Photo 2 of 2 : SP_2015_RD0524_107_24_20150309_00040.jpg



Looking north at dense vegetation on the landside and waterside slopes.

LM Start	1.60	Rating **	A/W	Issue No.	25
LM End	1.61	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_25				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

Photo 1 of 1 : SP_2015_RD0524_107_25_20150309_00041.jpg



Looking southeast at dense vegetation on the waterside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.62	Rating **	M	Issue No.	26
LM End	1.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.927507 °	37.927295 °
				-121.327593 °	-121.327298 °
DWR ID	DWR_RD0524_01_s_2012_26				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Several erosions along this reach.					

Photo 1 of 3 : SP_2015_RD0524_107_26_20150424_00214.jpg



Looking south at waterward erosion.

LM Start	1.62	Rating **	M	Issue No.	26 (cont)
LM End	1.64	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2015_RD0524_107_26_20150424_00215.jpg



Looking east at waterward erosion.

LM Start	1.62	Rating **	M	Issue No.	26 (cont)
LM End	1.64	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2015_RD0524_107_26_20150424_00216.jpg



Looking east at waterward erosion and depression.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.64	Rating **	U	Issue No.	39
LM End	1.64	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927372 °	37.927372 °
				-121.327278 °	-121.327278 °
DWR ID	DWR_RD0524_01_s _ 2012_39				
Action/Comments					
Pole					
Inspector Comments: Landowner constructed boat dock without permission from the CVFPB.					

Photo 1 of 2 : SP_2015_RD0524_107_39_20150309_00057.jpg



Looking at garbage on waterside slope.

LM Start	1.64	Rating **	U	Issue No.	39 (cont)
LM End	1.64	Issue Type +	En	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_39_20150309_00058.jpg



Looking east at non-permitted boat dock.

LM Start	1.65	Rating **	N	Issue No.	8
LM End	1.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927255 °	37.926855 °
				-121.327137 °	-121.326672 °
DWR ID	DWR_RD0524_01_s _ 2012_8				
Action/Comments					
Tree stumps.					
Inspector Comments: Several tree stumps on waterside shoulder.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.67	Rating **	M	Issue No.	45
LM End	1.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.927018 °	37.927018 °
				-121.326872 °	-121.326872 °
DWR ID	DWR_RD0524_01_s_2012_45				
Action/Comments					
Stairway					
Inspector Comments: Stairs and retaining wall					

LM Start	1.67	Rating **	M	Issue No.	45 (cont)
LM End	1.67	Issue Type +	Ma	Location *	WS

LM Start	1.67	Rating **	M	Issue No.	45 (cont)
LM End	1.67	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SP_2015_RD0524_107_45_20150309_00062.jpg



Looking northeast at non-permitted concrete stairs on waterside slope.

Photo 2 of 3 : SP_2015_RD0524_107_45_20150309_00063.jpg



Looking southwest at retaining wall connected to concrete stairs.

Photo 3 of 3 : SP_2015_RD0524_107_45_20150309_00064.jpg



Looking west at concrete stairs on waterside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.69	Rating **	M	Issue No.	27
LM End	1.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.926728 °	37.926730 °
				-121.326597 °	-121.326508 °
DWR ID	DWR_RD0524_01_s _ 2012_27				
Action/Comments					
Repair slope instability. Inspector Comments: Slope damage several feet long and greater than one inch deep.					

Photo 1 of 1 : SP_2015_RD0524_107_27_20150424_00217.jpg



Looking south at landward slope depression.

LM Start	1.73	Rating **	A/W	Issue No.	28
LM End	1.73	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926322 °	37.926322 °
				-121.326115 °	-121.326115 °
DWR ID	DWR_RD0524_01_s _ 2012_28				
Action/Comments					
Garbage Inspector Comments: Large pruning piles on landside slope.					

Photo 1 of 2 : SP_2015_RD0524_107_28_20150309_00042.jpg



Looking southwest at trash and a pruning pile on landward berm.

LM Start	1.73	Rating **	A/W	Issue No.	28 (cont)
LM End	1.73	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_28_20150309_00043.jpg



Looking at southwest at a pruning pile at landward berm.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.	46
LM End	1.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926152 °	37.925993 °
				-121.325927 °	-121.325777 °
DWR ID	DWR_RD0524_01_s_2012_46				
Action/Comments					
Tree or limb					
Inspector Comments: Downed tree limbs on landward slope.					

Photo 1 of 4 : SP_2015_RD0524_107_46_20150309_00065.jpg



Looking south at tree limbs on landward slope.

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS

Photo 2 of 4 : SP_2015_RD0524_107_46_20150309_00066.jpg



Looking southwest at tree limbs on landward slope.

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS

Photo 3 of 4 : SP_2015_RD0524_107_46_20150309_00067.jpg



Looking south at tree limbs on landward slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.75	Rating **	U	Issue No.	46 (cont)
LM End	1.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926152 °	37.925993 °
				-121.325927 °	-121.325777 °
DWR ID	DWR_RD0524_01_s _ 2012_46				
Action/Comments					
Tree or limb					
Inspector Comments: Downed tree limbs on landward slope.					

Photo 4 of 4 : SP_2015_RD0524_107_46_20150309_00068.jpg



Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

LM Start	1.76	Rating **	A/W	Issue No.	181
LM End	1.76	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.925972 °	37.925972 °
				-121.325769 °	-121.325769 °
DWR ID	DWR_RD0524_01_s _ 2014_181				
Action/Comments					
Material					
Inspector Comments: Landowner stockpiling pallets at landward toe.					

Photo 1 of 1 : SP_2015_RD0524_107_181_20150309_00149.jpg



Looking west at wooden pallets at landward toe.

LM Start	1.78	Rating **	A/W	Issue No.	100
LM End	1.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.925752 °	37.925752 °
				-121.325592 °	-121.325592 °
DWR ID	DWR_RD0524_01_s _ 2012_100				
Action/Comments					
Prunings					

Photo 1 of 1 : SP_2015_RD0524_107_100_20150309_00103.jpg



Looking southwest at prunings on landside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.82	Rating **	M	Issue No.	942
LM End	1.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925480 °	37.925480 °
				-121.325358 °	-121.325358 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21866 DS_ID:24032 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. FIELD_STRUCT_DESC: 12-inch wrapped steel irrigation pipe through the levee at an unknown depth below the crown. Pump, butterfly valves, vent, and siphon breaker at concrete pad 50-feet off LS toe. Siphon breaker in 14-inch concrete standpipe on LS shoulder. FS Date: 08/20/2013					

No Photos

LM Start	1.83	Rating **	M	Issue No.	943
LM End	1.83	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925431 °	37.925431 °
				-121.325310 °	-121.325310 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21865 DS_ID:24033 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipes appear abandoned and should be removed from levee. FIELD_STRUCT_DESC: One 1-inch and two 3/4-inch PVC conduits through the levee 6-inches below the crown. FS Date: 08/20/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.83	Rating **	M	Issue No.	944
LM End	1.83	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.925429 °	37.925429 °
				-121.325323 °	-121.325323 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:17847 DS_ID:20609 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 14-inch pipe through levee 20.0 feet below crown, 2 pumps and gate valves discharge into surge tank in pump house on the waterward slope. Concrete distribution box removed from the waterward slope. Abandoned 36-inch diameter concrete standpipe on LS toe next to service pole. Originally included in the 1964 O&M manual. FS Date: 08/20/2013					

No Photos

LM Start	1.90	Rating **	M	Issue No.	78
LM End	1.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.924364 °	37.923805 °
				-121.324473 °	-121.324238 °
DWR ID	DWR_RD0524_01_s_2012_78				
Action/Comments					
Landscaping					

Photo 1 of 1 : SP_2015_RD0524_107_78_20150309_00090.jpg



Looking southwest at landscaping on landside slope. (Spring 2012)

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.94	Rating **	A/W	Issue No.	104
LM End	1.94	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.923808 °	37.923808 °
				-121.324260 °	-121.324260 °
DWR ID	DWR_RD0524_01_s _ 2012_104				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Bamboo outside of the twenty foot vegetation zone.					

Photo 1 of 2 : SP_2015_RD0524_107_104_20150309_00106.jpg



Looking northeast at sprayed bamboo on waterside slope. (Fall 2012)

LM Start	1.94	Rating **	A/W	Issue No.	104 (cont)
LM End	1.94	Issue Type +	En	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_104_20150309_00107.jpg



Looking southeast at bamboo on waterside slope.

LM Start	1.94	Rating **	U	Issue No.	176
LM End	1.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.923688 °	37.923688 °
				-121.324223 °	-121.324223 °
DWR ID	DWR_RD0524_01_s _ 2015_176				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Landward caving (3 x 18" x 5) caused by broken sprinklers.					

Photo 1 of 2 : SP_2015_RD0524_107_176_20150424_00218.jpg



Looking west at erosion within landscaping on landward shoulder and slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	1.94	Rating **	U	Issue No.	176 (cont)	
LM End	1.94	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.923688 °	37.923688 °	
				-121.324223 °	-121.324223 °	
DWR ID	DWR_RD0524_01_s_2015_176					
Action/Comments						
Schedule repair of erosion site prior to the next inspection.						
Inspector Comments: Landward caving (3 x 18" x 5) caused by broken sprinklers.						

Photo 2 of 2 : SP_2015_RD0524_107_176_20150424_00219.jpg



Looking east at erosion within landscaping on landward slope and shoulder.

LM Start	1.99	Rating **	M	Issue No.	4
LM End	1.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.923068 °	37.923068 °
				-121.323990 °	-121.323990 °
DWR ID	DWR_RD0524_01_f_2012_4				
Action/Comments					
Stairway Inspector Comments: Landowner installed rubber tires for a stairway on landside slope.					

Photo 1 of 1 : SP_2015_RD0524_107_4_20150309_00009.jpg



Looking west at rubber tires being used as stairs on landside slope.

LM Start	1.99	Rating **	M	Issue No.	105
LM End	1.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.923032 °	37.923032 °
				-121.323933 °	-121.323933 °
DWR ID	DWR_RD0524_01_s_2012_105				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

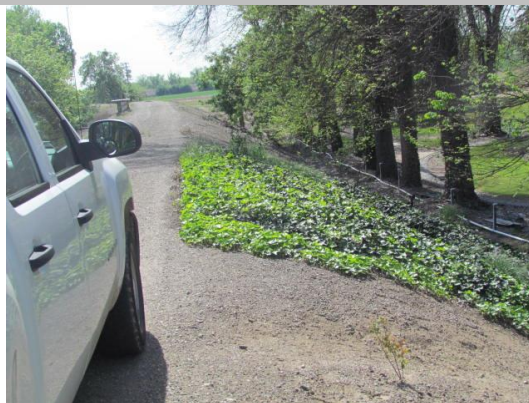
Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.00	Rating **	M	Issue No.	106
LM End	2.00	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922923 °	37.922923 °
				-121.323837 °	-121.323837 °
DWR ID	DWR_RD0524_01_s_2012_106				
Action/Comments					
Landscaping					

Photo 1 of 1 : SP_2015_RD0524_107_106_20150309_00108.jpg



Looking southwest at ground cover on landward slope.

LM Start	2.01	Rating **	M	Issue No.	182
LM End	2.04	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.922837 °	37.922514 °
				-121.323785 °	-121.323504 °
DWR ID	DWR_RD0524_01_s_2014_182				
Action/Comments					
Ditch Inspector Comments: Old irrigation ditch at the landward toe should be removed.					

Photo 1 of 2 : SP_2015_RD0524_107_182_20150309_00150.jpg



Looking northwest at an old irrigation ditch at landward toe.

LM Start	2.01	Rating **	M	Issue No.	182 (cont)
LM End	2.04	Issue Type +	En	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_182_20150309_00151.jpg



Looking southwest at an old irrigation ditch at landward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.01	Rating **	M	Issue No.	945
LM End	2.01	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.923022 °	37.923022 °
				-121.323953 °	-121.323953 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21872 DS_ID:24035 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing.					

No Photos

LM Start	2.05	Rating **	M	Issue No.	946
LM End	2.05	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922535 °	37.922535 °
				-121.323568 °	-121.323568 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21883 DS_ID:24036 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe abandoned and should be done so properly. Holes visible throughout exposed pipe. FIELD_STRUCT_DESC: 5-inch wrapped steel irrigation pipe through the levee 6-feet below the crown. No pump or other appurtances found. FS Date: 08/20/2013					

No Photos

LM Start	2.08	Rating **	M	Issue No.	183
LM End	2.08	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922009 °	37.922009 °
				-121.323015 °	-121.323015 °
DWR ID	DWR_RD0524_01_s_2014_183				
Action/Comments					
Elderberries are blocking visibility and flood fight capability. Inspector Comments: Cactus on waterward slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.09	Rating **	M	Issue No.	947
LM End	2.09	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922080 °	37.922080 °
				-121.323118 °	-121.323118 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21895 DS_ID:24038 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 6-inch steel irrigation pipe through the levee at an unknown depth. Vent, meter, butterfly valve, and pump at pumphouse on WS slope. FS Date: 08/20/2013					

No Photos

LM Start	2.10	Rating **	M	Issue No.	948
LM End	2.10	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.922064 °	37.922064 °
				-121.323084 °	-121.323084 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:17944					
DS_ID:20612					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Soil excavated from cover over pipe on WS next to concrete riser. May indicate a leak or other problem.					
FIELD_STRUCT_DESC: 20-inch steel pipe through the levee 15.0 feet below the crown. Pump in pump house on the waterward slope. Slide gate in 4-foot diameter concrete standpipe on WS slope with secondary concrete standpipe. PVC standpipe visible 350-feet off LS toe.					
Originally included in the 1964 O&M manual.					
FS Date: 08/20/2013					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.13	Rating **	A/W	Issue No.	6
LM End	2.19	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.921540 °	37.920959 °
				-121.322293 °	-121.321365 °
DWR ID	DWR_RD0524_01_f_2012_6				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

LM Start	2.15	Rating **	A/W	Issue No.	30
LM End	2.16	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.921383 °	37.921300 °
				-121.322043 °	-121.321902 °
DWR ID	DWR_RD0524_01_s_2012_30				
Action/Comments					
Note and monitor erosion site.					

No Photos

LM Start	2.19	Rating **	M	Issue No.	31
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.920992 °	37.920505 °
				-121.321373 °	-121.320485 °
DWR ID	DWR_RD0524_01_s_2012_31				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : SP_2015_RD0524_107_31_20150309_00044.jpg



Looking south slope damage on waterward shoulder and slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.19	Rating **	U	Issue No.	146
LM End	2.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920992 °	37.920992 °
				-121.321370 °	-121.321370 °
DWR ID	DWR_RD0524_01_s _ 2015_146				
Action/Comments					
Inspector Comments: 7/22/2014: The erosion has increased in size. 08/13/2013: No significant change observed. Slightly more vegetation was visible. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM42.79]					

Photo 1 of 1 : SP_2015_RD0524_107_146_20150309_00142.jpg



View from downstream.

LM Start	2.25	Rating **	U	Issue No.	147
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.920650 °	37.920650 °
				-121.320370 °	-121.320370 °
DWR ID	DWR_RD0524_01_s _ 2015_147				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: An irrigation pipe is on site. [2014 Site ID:RD0524U01RM42.84]					

Photo 1 of 1 : SP_2015_RD0524_107_147_20150309_00143.jpg



View from upstream.

LM Start	2.27	Rating **	U	Issue No.	32
LM End	2.28	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.920372 °	37.920273 °
				-121.320230 °	-121.320022 °
DWR ID	DWR_RD0524_01_s _ 2012_32				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : SP_2015_RD0524_107_32_20150309_00045.jpg



Looking south at dense veg on landside slope and toe.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.32	Rating **	M	Issue No.	34
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.919885 °	37.919703 °
				-121.319713 °	-121.319702 °
DWR ID	DWR_RD0524_01_s _ 2012_34				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Slope damage caused by walking traffic and using bank as a fishing platform.					

Photo 1 of 1 : SP_2015_RD0524_107_34_20150309_00048.jpg



Looking northeast at damage to the slope possibly caused by human activity.

LM Start	2.33	Rating **	M	Issue No.	107
LM End	2.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919742 °	37.919742 °
				-121.319623 °	-121.319623 °
DWR ID	DWR_RD0524_01_s _ 2012_107				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.38	Rating **	A/W	Issue No.	184
LM End	2.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919036 °	37.919036 °
				-121.319969 °	-121.319969 °
DWR ID	DWR_RD0524_01_s _ 2014_184				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.41	Rating **	U	Issue No.	35
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918785 °	37.918515 °
				-121.320417 °	-121.321110 °
DWR ID	DWR_RD0524_01_s _ 2012_35				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : SP_2015_RD0524_107_35_20150309_00049.jpg



Looking southwest at dense vegetation on landward toe.

LM Start	2.44	Rating **	M	Issue No.	36
LM End	2.47	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918628 °	37.918438 °
				-121.320817 °	-121.321452 °
DWR ID	DWR_RD0524_01_s _ 2012_36				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 1 : SP_2015_RD0524_107_36_20150309_00050.jpg



Looking east at erosion on waterside slope.

LM Start	2.45	Rating **	M	Issue No.	80
LM End	2.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.918480 °	37.918480 °
				-121.321114 °	-121.321114 °
DWR ID	DWR_RD0524_01_s _ 2012_80				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 2 : SP_2015_RD0524_107_80_20150309_00092.jpg

Looking southwest at dense vegetation and trees on landside slope.
(Fall 2012)

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.45	Rating **	M	Issue No.	80 (cont)	
LM End	2.45	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Trim / Thin Trees			37.918480 °	37.918480 °	
				-121.321114 °	-121.321114 °	
DWR ID	DWR_RD0524_01_s_2012_80					
Action/Comments						
Trim trees to at least five feet above ground level.						

Photo 2 of 2 : SP_2015_RD0524_107_80_20150309_00093.jpg



Looking southwest at dense vegetation on landside toe.

LM Start	2.49	Rating **	U	Issue No.	37
LM End	2.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918345 °	37.918302 °
				-121.321765 °	-121.321923 °
DWR ID	DWR_RD0524_01_s_2012_37				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 4 : SP_2015_RD0524_107_37_20150309_00051.jpg



Looking south at elderberry on landside slope.

LM Start	2.49	Rating **	U	Issue No.	37 (cont)
LM End	2.50	Issue Type +	Ma	Location *	LS

Photo 2 of 4 : SP_2015_RD0524_107_37_20150309_00052.jpg



Looking southwest at dense vegetation on landside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.49	Rating **	U	Issue No.	37 (cont)
LM End	2.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918345 °	37.918302 °
				-121.321765 °	-121.321923 °
DWR ID	DWR_RD0524_01_s _ 2012_37				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 3 of 4 : SP_2015_RD0524_107_37_20150309_00053.jpg



Looking north at elderberry and trees on landside slope.

LM Start	2.49	Rating **	U	Issue No.	37 (cont)
LM End	2.50	Issue Type +	Ma	Location *	LS

Photo 4 of 4 : SP_2015_RD0524_107_37_20150309_00054.jpg



Looking southwest at trees along levee landside toe.

LM Start	2.50	Rating **	U	Issue No.	38
LM End	2.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918287 °	37.918287 °
				-121.321980 °	-121.321980 °
DWR ID	DWR_RD0524_01_s _ 2012_38				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 2 : SP_2015_RD0524_107_38_20150309_00055.jpg



Looking north at elderberry on waterside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.50	Rating **	U	Issue No.	38 (cont)
LM End	2.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918287 °	37.918287 °
				-121.321980 °	-121.321980 °
DWR ID	DWR_RD0524_01_s _ 2012_38				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 2 of 2 : SP_2015_RD0524_107_38_20150309_00056.jpg



Looking south at elderberry on waterside slope.

LM Start	2.53	Rating **	M	Issue No.	82
LM End	2.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.918060 °	37.917667 °
				-121.322384 °	-121.322713 °
DWR ID	DWR_RD0524_01_s _ 2012_82				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : SP_2015_RD0524_107_82_20150309_00094.jpg



Looking southwest at damaged landward slope.

LM Start	2.53	Rating **	M	Issue No.	40
LM End	2.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918047 °	37.918047 °
				-121.322415 °	-121.322415 °
DWR ID	DWR_RD0524_01_s _ 2012_40				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.56	Rating **	M	Issue No.	41
LM End	2.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.917673 °	37.917673 °
				-121.322718 °	-121.322718 °
DWR ID	DWR_RD0524_01_s_2012_41				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	2.56	Rating **	U	Issue No.	42
LM End	2.56	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917673 °	37.917673 °
				-121.322718 °	-121.322718 °
DWR ID	DWR_RD0524_01_s_2012_42				
Action/Comments					
Building Inspector Comments: Animal pens on landward slope and toe.					

Photo 1 of 2 : SP_2015_RD0524_107_42_20150309_00059.jpg



Looking west at animal pens on landside toe. (Fall 2012)

LM Start	2.56	Rating **	U	Issue No.	42 (cont)
LM End	2.56	Issue Type +	En	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_42_20150309_00060.jpg



Looking at animal pens on landside slope and toe.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.57	Rating **	M	Issue No.	12
LM End	2.57	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917538 °	37.917538 °
				-121.322757 °	-121.322757 °
DWR ID	DWR_RD0524_01_f_2012_12				
Action/Comments					
Pole					
Inspector Comments: Old fence poles on landside shoulder and slope should be removed.					

Photo 1 of 1 : SP_2015_RD0524_107_12_20150309_00016.jpg



Looking northwest at fence poles on landside shoulder.

LM Start	2.58	Rating **	M	Issue No.	917
LM End	2.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.917475 °	37.917475 °
				-121.322808 °	-121.322808 °
DWR ID	DWR_RD0524_01_s_2012_917				
Action/Comments					
Repair the levee slope damaged by livestock and prevent large animal access.					

No Photos

LM Start	2.58	Rating **	M	Issue No.	7
LM End	2.58	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.917431 °	37.917431 °
				-121.322780 °	-121.322780 °
DWR ID	DWR_RD0524_01_f_2012_7				
Action/Comments					
Ramp					

Photo 1 of 1 : SP_2015_RD0524_107_7_20150309_00011.jpg



Looking southeast at unauthorized ramp on waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.59	Rating **	M	Issue No.	9
LM End	2.59	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.917228 °	37.917228 °
				-121.322730 °	-121.322730 °
DWR ID	DWR_RD0524_01_s _ 2012_9				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

LM Start	2.60	Rating **	M	Issue No.	185
LM End	2.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.917152 °	37.916807 °
				-121.322582 °	-121.322069 °
DWR ID	DWR_RD0524_01_s _ 2014_185				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					

No Photos

LM Start	2.61	Rating **	M	Issue No.	949
LM End	2.61	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.917365 °	37.917365 °
				-121.322779 °	-121.322779 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:21935 DS_ID:24040 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Need to determine type of abandonment for pipe at this location. FIELD_STRUCT_DESC: *Abandoned* Pump pad on LS shoulder with 4'X9' brick distribution box on WS slope. No pipe visible. 4'X9' brick distribution box on LS toe. FS Date: 08/20/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.64	Rating **	M	Issue No.	43
LM End	2.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.916780 °	37.916780 °
				-121.322095 °	-121.322095 °
DWR ID	DWR_RD0524_01_s _ 2012_43				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	2.65	Rating **	A/W	Issue No.	918
LM End	2.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916718 °	37.916502 °
				-121.322020 °	-121.321980 °
DWR ID	DWR_RD0524_01_s _ 2012_918				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.65	Rating **	U	Issue No.	920
LM End	2.65	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.916698 °	37.916698 °
				-121.322007 °	-121.322007 °
DWR ID	DWR_RD0524_01_s _ 2012_920				
Action/Comments					
Ramp					

Photo 1 of 1 : SP_2015_RD0524_107_920_20150309_00168.jpg



Looking southeast at unauthorized ramp on waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.67	Rating **	A/W	Issue No.	44
LM End	2.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916418 °	37.915142 °
				-121.321963 °	-121.323018 °
DWR ID	DWR_RD0524_01_s_2012_44				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level. Inspector Comments: Trim over hanging trees at least 12 feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_44_20150309_00061.jpg



Looking north at dense trees overhanging levee crown.

LM Start	2.68	Rating **	M	Issue No.	21
LM End	2.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.916224 °	37.916224 °
				-121.322115 °	-121.322115 °
DWR ID	DWR_RD0524_01_f_2013_21				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Large erosion around irrigation pipe.					

Photo 1 of 2 : SP_2015_RD0524_107_21_20150309_00032.jpg



Looking at erosion around irrigation pipe on waterward slope.

LM Start	2.68	Rating **	M	Issue No.	21 (cont)
LM End	2.68	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2015_RD0524_107_21_20150309_00033.jpg



Looking east at erosion around irrigation pipe on waterward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.70	Rating **	A/W	Issue No.	264
LM End	2.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915968 °	37.915968 °
				-121.322275 °	-121.322275 °
DWR ID	DWR_RD0524_01_s _ 2012_264				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	2.72	Rating **	M	Issue No.	60
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915747 °	37.915492 °
				-121.322470 °	-121.322639 °
DWR ID	DWR_RD0524_01_s _ 2012_60				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.74	Rating **	A/W	Issue No.	70
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915503 °	37.915503 °
				-121.322745 °	-121.322745 °
DWR ID	DWR_RD0524_01_s _ 2012_70				
Action/Comments					
Tree or limb					
Inspector Comments: Broken tree branch.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.75	Rating **	M	Issue No.	950
LM End	2.75	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.915698 °	37.915698 °
				-121.322501 °	-121.322501 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18085 DS_ID:20616 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for crossing. Unknoww use. Pipe should be removed. FIELD_STRUCT_DESC: 3-inch galvanized iron pipe through the levee 0.3 feet below the crown. Valve on the landward shoulder. FS Date: 08/20/2013					

No Photos

LM Start	2.78	Rating **	A/W	Issue No.	921
LM End	2.78	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915125 °	37.915125 °
				-121.323227 °	-121.323227 °
DWR ID	DWR_RD0524_01_s_2012_921				
Action/Comments					
Prunings					

No Photos

LM Start	2.80	Rating **	U	Issue No.	48
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.915022 °	37.915022 °
				-121.323443 °	-121.323443 °
DWR ID	DWR_RD0524_01_s_2012_48				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 2 : SP_2015_RD0524_107_48_20150309_00069.jpg



Looking south at dense elderberry on landside slope.(Spring 2012)

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.80	Rating **	U	Issue No.	48 (cont)	
LM End	2.80	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.915022 °		37.915022 °
				-121.323443 °		-121.323443 °
DWR ID	DWR_RD0524_01_s _ 2012_48					
Action/Comments						
Elderberries are blocking visibility and flood fight capability.						

Photo 2 of 2 : SP_2015_RD0524_107_48_20150309_00070.jpg



Looking south at elderberry on landside slope.(Spring 2011)

LM Start	2.80	Rating **	U	Issue No.	91
LM End	2.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915063 °	37.915063 °
				-121.323585 °	-121.323585 °
DWR ID	DWR_RD0524_01_s _ 2012_91				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : SP_2015_RD0524_107_91_20150309_00096.jpg



Looking southwest at dense vegetation on landside slope.

LM Start	2.86	Rating **	U	Issue No.	49
LM End	2.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.914427 °	37.914427 °
				-121.324198 °	-121.324198 °
DWR ID	DWR_RD0524_01_s _ 2012_49				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : SP_2015_RD0524_107_49_20150309_00071.jpg



Looking northwest at elderberry on landside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.90	Rating **	U	Issue No.	50
LM End	2.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.913767 °	37.913503 °
				-121.324427 °	-121.324488 °
DWR ID	DWR_RD0524_01_s _ 2012_50				
Action/Comments					
Prunings					

Photo 1 of 1 : SP_2015_RD0524_107_50_20150309_00072.jpg



Looking southwest at prunings on landside slope.

LM Start	2.93	Rating **	M	Issue No.	51
LM End	2.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.913415 °	37.913415 °
				-121.324503 °	-121.324503 °
DWR ID	DWR_RD0524_01_s _ 2012_51				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_51_20150424_00220.jpg



Looking south at dense trees on landward slope.

LM Start	2.96	Rating **	U	Issue No.	193
LM End	2.96	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.913010 °	37.913010 °
				-121.324490 °	-121.324490 °
DWR ID	DWR_RD0524_01_s _ 2015_193				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM43.52]					

Photo 1 of 1 : SP_2015_RD0524_107_193_20150309_00154.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	2.98	Rating **	M	Issue No.	951
LM End	2.98	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.913101 °	37.913101 °
				-121.324500 °	-121.324500 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18089 DS_ID:20617 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Review crossing with inspector as records indicate that this should be an 8-inch pipe through levee 3.0 feet below crown, pump on landward side. Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual. FIELD_STRUCT_DESC: 16-inch wrapped steel storm discharge pipe through the levee 1.5-feet below the crown. Pump on steel pile structure at drainage canal off LS toe. FS Date: 08/20/2013					

No Photos

LM Start	3.02	Rating **	M	Issue No.	924
LM End	3.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.912163 °	37.912163 °
				-121.324702 °	-121.324702 °
DWR ID	DWR_RD0524_01_s _ 2012_924				
Action/Comments					
Repair the levee slope damaged by livestock and prevent large animal access.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.07	Rating **	M	Issue No.	925
LM End	3.14	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.911382 °	37.910558 °
				-121.324928 °	-121.325432 °
DWR ID	DWR_RD0524_01_s _ 2012_925				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Several rodent holes on levee slopes.					

Photo 1 of 1 : SP_2015_RD0524_107_925_20150424_00221.jpg



Looking at typical rodent holes on landward slope along this reach.

LM Start	3.27	Rating **	A/W	Issue No.	186
LM End	3.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908551 °	37.908551 °
				-121.325381 °	-121.325381 °
DWR ID	DWR_RD0524_01_s _ 2014_186				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.30	Rating **	A/W	Issue No.	926
LM End	3.32	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908158 °	37.907872 °
				-121.325418 °	-121.325443 °
DWR ID	DWR_RD0524_01_s _ 2012_926				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.31	Rating **	U	Issue No.	5
LM End	3.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908090 °	37.908090 °
				-121.325090 °	-121.325090 °
DWR ID	DWR_RD0524_01_s _ 2015_5				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2014 Site ID:RD0524U01RM43.86]					

Photo 1 of 1 : SP_2015_RD0524_107_5_20150309_00010.jpg



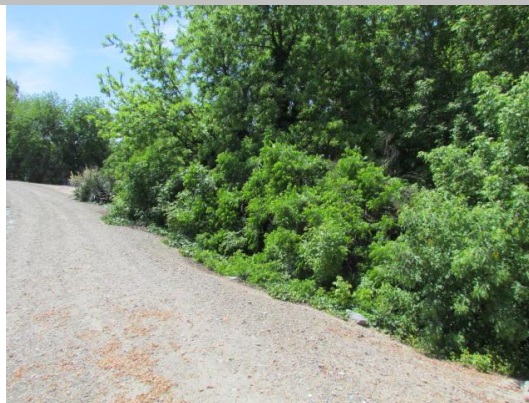
View from upstream of the erosion.

LM Start	3.34	Rating **	A/W	Issue No.	52
LM End	3.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.907645 °	37.907157 °
				-121.325442 °	-121.325408 °
DWR ID	DWR_RD0524_01_s _ 2012_52				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.35	Rating **	U	Issue No.	92
LM End	3.37	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.907407 °	37.907177 °
				-121.325435 °	-121.325392 °
DWR ID	DWR_RD0524_01_s _ 2012_92				
Action/Comments					
Landscaping					

Photo 1 of 1 : SP_2015_RD0524_107_92_20150309_00097.jpg



Looking southwest at dense landscaping on landside slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.36	Rating **	M	Issue No.	53
LM End	3.42	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.907283 °	37.906503 °
				-121.325432 °	-121.325002 °
DWR ID	DWR_RD0524_01_s_2012_53				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows.					

No Photos

LM Start	3.38	Rating **	U	Issue No.	952
LM End	3.38	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.907504 °	37.907504 °
				-121.325420 °	-121.325420 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:42932 DS_ID:20618 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: Extensive erosion on LS toe at distribution box due to failure of box/pipe connection. Erosion on LS slope do to recently repaired leak at gate valve. FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee 7-feet below the crown, pump house on the waterward slope. Gate valve on the LS slope and a 4'X4' brick distribution box at the LS toe. Originally included in the 1964 O&M manual. FS Date: 08/20/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.40	Rating **	U	Issue No.	54
LM End	3.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.906747 °	37.906192 °
				-121.325248 °	-121.324543 °
DWR ID	DWR_RD0524_01_s _ 2012_54				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : SP_2015_RD0524_107_54_20150309_00073.jpg



Looking northwest at dense vegetation on landside slope.

LM Start	3.42	Rating **	M	Issue No.	56
LM End	3.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.906540 °	37.906540 °
				-121.325015 °	-121.325015 °
DWR ID	DWR_RD0524_01_s _ 2012_56				
Action/Comments					
Material					
Inspector Comments: Broken concrete pipes					

Photo 1 of 1 : SP_2015_RD0524_107_56_20150309_00075.jpg



Looking southwest at concrete pipes on landside toe.

LM Start	3.45	Rating **	U	Issue No.	93
LM End	3.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.906265 °	37.906265 °
				-121.324643 °	-121.324643 °
DWR ID	DWR_RD0524_01_s _ 2012_93				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : SP_2015_RD0524_107_93_20150309_00098.jpg



Looking northwest at low hanging tree branches on landside slope and toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.48	Rating **	M	Issue No.	177
LM End	3.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.905994 °	37.905994 °
				-121.324194 °	-121.324194 °
DWR ID	DWR_RD0524_01_f_2014_177				
Action/Comments					
Tree or limb					
Inspector Comments: Dead tree on landward toe.					

No Photos

LM Start	3.51	Rating **	U	Issue No.	57
LM End	3.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.905638 °	37.904430 °
				-121.323892 °	-121.324570 °
DWR ID	DWR_RD0524_01_s_2012_57				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : SP_2015_RD0524_107_57_20150309_00076.jpg



Looking south at dense trees on landward slope.

LM Start	3.51	Rating **	M	Issue No.	265
LM End	3.51	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.905552 °	37.905552 °
				-121.323847 °	-121.323847 °
DWR ID	DWR_RD0524_01_s_2012_265				
Action/Comments					
Ramp					
Inspector Comments: Unauthorized ramp on landside slope.					

Photo 1 of 1 : SP_2015_RD0524_107_265_20150309_00159.jpg



Looking southeast at unauthorized ramp on landside slope and toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.57	Rating **	M	Issue No.	55
LM End	3.57	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.904630 °	37.904630 °
				-121.323610 °	-121.323610 °
DWR ID	DWR_RD0524_01_s _ 2015_55				
Action/Comments					
Inspector Comments: 6/19/2014: The previous erosion was repaired. New erosion was found below the repaired levee slope. 08/13/2013: No significant change observed. 08/07/2012: The levee toe has been cut off along a 150 ft. long river stretch. The erosion is located just upstream of a river bend. [2014 Site ID:RD0524U01RM44.13]					

Photo 1 of 1 : SP_2015_RD0524_107_55_20150309_00074.jpg



View of the repaired site.

LM Start	3.61	Rating **	M	Issue No.	124
LM End	3.61	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.904375 °	37.904375 °
				-121.324615 °	-121.324615 °
DWR ID	DWR_RD0524_01_f _ 2012_124				
Action/Comments					
Landscaping Inspector Comments: Landowner planted cactus on landside toe.					

Photo 1 of 1 : SP_2015_RD0524_107_124_20150309_00125.jpg



Looking west at cactus on landside toe.

LM Start	3.64	Rating **	M	Issue No.	58
LM End	3.64	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.904113 °	37.904113 °
				-121.325080 °	-121.325080 °
DWR ID	DWR_RD0524_01_s _ 2012_58				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Landowner cut steps into waterside slope.					

Photo 1 of 1 : SP_2015_RD0524_107_58_20150309_00077.jpg



Looking southeast steps cut into waterside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.67	Rating **	U	Issue No.	192
LM End	3.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903782 °	37.903782 °
				-121.325363 °	-121.325363 °
DWR ID	DWR_RD0524_01_s_2015_192				
Action/Comments					
Prunings					
Inspector Comments: Large pruning piles at landward toe.					

Photo 1 of 1 : SP_2015_RD0524_107_192_20150424_00222.jpg



Looking east at pruning pile at landward toe.

LM Start	3.69	Rating **	M	Issue No.	194
LM End	3.78	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.903553 °	37.902505 °
				-121.325468 °	-121.326425 °
DWR ID	DWR_RD0524_01_s_2015_194				
Action/Comments					
Ditch					
Inspector Comments: Irrigation ditch at landward toe.					

Photo 1 of 2 : SP_2015_RD0524_107_194_20150424_00223.jpg



Looking south at irrigation ditch at landward toe.

LM Start	3.69	Rating **	M	Issue No.	194 (cont)
LM End	3.78	Issue Type +	En	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_194_20150424_00224.jpg



Looking east at south end of irrigation ditch at landward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.77	Rating **	M	Issue No.	927
LM End	3.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902645 °	37.902645 °
				-121.326340 °	-121.326340 °
DWR ID	DWR_RD0524_01_s _ 2012_927				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_927_20150424_00225.jpg



Looking east at untrimmed tree on landward slope.

LM Start	3.78	Rating **	M	Issue No.	59
LM End	3.78	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902417 °	37.902417 °
				-121.326482 °	-121.326482 °
DWR ID	DWR_RD0524_01_s _ 2012_59				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_59_20150424_00226.jpg



Looking south at untrimmed trees on landward slope.

LM Start	3.79	Rating **	M	Issue No.	266
LM End	3.79	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.902365 °	37.902365 °
				-121.326453 °	-121.326453 °
DWR ID	DWR_RD0524_01_s _ 2012_266				
Action/Comments					
Equipment					
Inspector Comments: Landowner installed water filter piping system without permit.					

Photo 1 of 3 : SP_2015_RD0524_107_266_20150309_00160.jpg



Looking south at unauthorized irrigation pipe across levee and water filtration system at landside toe.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.79	Rating **	M	Issue No.	266 (cont)	
LM End	3.79	Issue Type +	En	Location *	CR	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.902365 °	37.902365 °	
				-121.326453 °	-121.326453 °	
DWR ID	DWR_RD0524_01_s _ 2012_266					
Action/Comments						
Equipment						
Inspector Comments: Landowner installed water filter piping system without permit.						

Photo 2 of 3 : SP_2015_RD0524_107_266_20150309_00161.jpg



Looking south unauthorized PVC irrigation pipe across the levee crown.

Photo 3 of 3 : SP_2015_RD0524_107_266_20150309_00162.jpg



Looking west at water filtration system on landside toe.

LM Start	3.80	Rating **	M	Issue No.	928
LM End	3.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902155 °	37.902002 °
				-121.326523 °	-121.326550 °
DWR ID	DWR_RD0524_01_s _ 2012_928				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.82	Rating **	M	Issue No.	953
LM End	3.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.902371 °	37.902371 °
				-121.326440 °	-121.326440 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22725 DS_ID:24044 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 0-feet below the crown. Pipe integrated into steel cattelguard style crossing. Slant pump and butterfly valve at concrete foundation on WS slope. Filter plant, vents, and butterfly valves on LS toe. FS Date: 08/20/2013					

No Photos

LM Start	3.82	Rating **	M	Issue No.	954
LM End	3.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.902361 °	37.902361 °
				-121.326443 °	-121.326443 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18307 DS_ID:20620 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. Evidence of severe internal corrosion in concrete distribution box at LS toe. FIELD_STRUCT_DESC: 12-inch concrete encased pipe through the levee 10.5 feet below the crown, pump and gate valve in pump house on the waterward slope. 6'X6' Concrete distribution box on the landward toe. Two concrete cutoff walls. Service pole at the landward toe. Originally included in the 1964 O&M manual. FS Date: 08/20/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.85	Rating **	M	Issue No.	187
LM End	3.85	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901447 °	37.901447 °
				-121.326500 °	-121.326500 °
DWR ID	DWR_RD0524_01_s_2014_187				
Action/Comments					
Tree or limb					
Inspector Comments: Tree limb on waterward shoulder.					

Photo 1 of 1 : SP_2015_RD0524_107_187_20150309_00152.jpg



Looking northeast at tree limb on waterward slope.

LM Start	3.86	Rating **	M	Issue No.	62
LM End	3.97	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901375 °	37.899745 °
				-121.326507 °	-121.326630 °
DWR ID	DWR_RD0524_01_s_2012_62				
Action/Comments					
Equipment					

Photo 1 of 2 : SP_2015_RD0524_107_62_20150309_00078.jpg



Looking south at northend of equipment stored at landward slope and toe.

LM Start	3.86	Rating **	M	Issue No.	62 (cont)
LM End	3.97	Issue Type +	En	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_62_20150309_00079.jpg



Looking upstream at equipment on landside shoulder

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.87	Rating **	U	Issue No.	95
LM End	3.90	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901147 °	37.900735 °
				-121.326453 °	-121.326425 °
DWR ID	DWR_RD0524_01_f_2013_95				
Action/Comments					
Equipment					
Inspector Comments: Landowner is storing equipment on landward shoulder and landward toe.					

Photo 1 of 3 : SP_2015_RD0524_107_95_20150309_00100.jpg



Looking south at farm equipment stored on landward shoulder and toe.

Photo 2 of 3 : SP_2015_RD0524_107_95_20150309_00101.jpg



Looking north at farm equipment stored on landward shoulder.

Photo 3 of 3 : SP_2015_RD0524_107_95_20150309_00102.jpg



Looking west at farm equipment stored at landward toe.

LM Start	3.87	Rating **	U	Issue No.	95 (cont)
LM End	3.90	Issue Type +	En	Location *	LS

LM Start	3.87	Rating **	U	Issue No.	95 (cont)
LM End	3.90	Issue Type +	En	Location *	LS

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	3.88	Rating **	M	Issue No.	94
LM End	3.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.900952 °	37.900952 °
				-121.326443 °	-121.326443 °
DWR ID	DWR_RD0524_01_s_2012_94				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Remove cactus					

Photo 1 of 1 : SP_2015_RD0524_107_94_20150309_00099.jpg



Looking southeast at cactus on waterside slope.

LM Start	3.89	Rating **	M	Issue No.	83
LM End	3.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.900854 °	37.900854 °
				-121.326438 °	-121.326438 °
DWR ID	DWR_RD0524_01_s_2012_83				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.93	Rating **	M	Issue No.	955
LM End	3.93	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.900778 °	37.900778 °
				-121.326420 °	-121.326420 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:41464 DS_ID:20621 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears to be abandoned as signage has been removed. FIELD_STRUCT_DESC: 2.5-inch submarine telephone conduit through levee and across channel 2.0 feet below crown. Sign posts remain on both sides of river on the waterward slope. FS Date: 08/20/2013					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.02	Rating **	U	Issue No.	195
LM End	4.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.899093 °	37.899093 °
				-121.326933 °	-121.326933 °
DWR ID	DWR_RD0524_01_s _ 2015_195				
Action/Comments					
Prunings					
Inspector Comments: Pruning pile blocking view of landward slope.					

Photo 1 of 1 : SP_2015_RD0524_107_195_20150424_00227.jpg



Looking east at pruning pile at landward toe.

LM Start	4.02	Rating **	U	Issue No.	101
LM End	4.02	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.899027 °	37.899027 °
				-121.326982 °	-121.326982 °
DWR ID	DWR_RD0524_01_s _ 2012_101				
Action/Comments					
Ramp Inspector Comments: Unauthorized ramp. Ramp does not meet Title 23 standard.					

Photo 1 of 1 : SP_2015_RD0524_107_101_20150309_00104.jpg



Looking west at unauthorized ramp on landside slope.

LM Start	4.03	Rating **	M	Issue No.	61
LM End	4.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.898925 °	37.898925 °
				-121.327015 °	-121.327015 °
DWR ID	DWR_RD0524_01_s _ 2012_61				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_61_20150424_00228.jpg



Looking east at untrimmed tree at landward toe.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.04	Rating **	A/W	Issue No.	64
LM End	4.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.898832 °	37.898090 °
				-121.327092 °	-121.327457 °
DWR ID	DWR_RD0524_01_s_2012_64				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

Photo 1 of 1 : SP_2015_RD0524_107_64_20150424_00229.jpg



Looking at typical view of grouted rodent holes on landward slope.

LM Start	4.07	Rating **	M	Issue No.	956
LM End	4.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.898853 °	37.898853 °
				-121.327049 °	-121.327049 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18314 DS_ID:20623 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 8-inch concrete encased pipe through the levee 9.5-feet below crown, pump and gate valve in pump house on the waterward slope. Slide gate in 42-inch corrugated metal pipe riser on the waterward slope. Brick standpipe at the toe of the landward slope. 1.5-inch galvanized iron electrical conduit through the levee 3-feet below the crown at the same location. Originally included in the 1964 O&M manual. FS Date: 08/20/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.10	Rating **	M	Issue No.	108
LM End	4.10	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.898035 °	37.898035 °
				-121.327447 °	-121.327447 °
DWR ID	DWR_RD0524_01_s_2012_108				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : SP_2015_RD0524_107_108_20150309_00109.jpg



Looking southwest at caving slope on landside of levee.

LM Start	4.16	Rating **	C	Issue No.	109
LM End	4.16	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Metal Pipes			37.897113 °	37.897113 °
				-121.327895 °	-121.327895 °
DWR ID	DWR_RD0524_01_s_2012_109				
Action/Comments					
Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.					

No Photos

LM Start	4.16	Rating **	M	Issue No.	110
LM End	4.16	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.897103 °	37.897103 °
				-121.327895 °	-121.327895 °
DWR ID	DWR_RD0524_01_s_2012_110				
Action/Comments					
Ramp					
Inspector Comments: Two unauthorized ramps on landward slope.					

Photo 1 of 1 : SP_2015_RD0524_107_110_20150309_00115.jpg



Looking southwest at an unauthorized ramp on landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.20	Rating **	M	Issue No.	957
LM End	4.20	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897118 °	37.897118 °
				-121.327910 °	-121.327910 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18318 DS_ID:20625 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak on WS slope causing minor erosion on WS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 4.5 feet below the crown, pumphouse and gate valve on the waterward slope. 36-inch concrete standpipe, power pole, and meter on LS toe. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	4.21	Rating **	M	Issue No.	958
LM End	4.21	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.897074 °	37.897074 °
				-121.327926 °	-121.327926 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22069 DS_ID:24049 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No permit identified for this crossing. FIELD_STRUCT_DESC: 2.25-inch PVC domestic water service through the levee 5-feet below the crown. Pump and tank on WS slope with a vent on the LS slope. FS Date: 08/23/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.36	Rating **	A/W	Issue No.	65
LM End	4.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894587 °	37.892493 °
				-121.329253 °	-121.328267 °
DWR ID	DWR_RD0524_01_s _ 2012_65				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	4.38	Rating **	M	Issue No.	111
LM End	4.38	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.894258 °	37.894258 °
				-121.329247 °	-121.329247 °
DWR ID	DWR_RD0524_01_s _ 2012_111				
Action/Comments					
Tree or limb Inspector Comments: Dead tree at landside toe should be removed from levee toe.					

Photo 1 of 1 : SP_2015_RD0524_107_111_20150309_00116.jpg



Looking west at dead tree at landside toe.

LM Start	4.40	Rating **	M	Issue No.	112
LM End	4.53	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.893928 °	37.892230 °
				-121.329203 °	-121.328187 °
DWR ID	DWR_RD0524_01_s _ 2012_112				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_112_20150424_00230.jpg



Looking southeast at untrimmed tree at landward toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.41	Rating **	M	Issue No.	959
LM End	4.41	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		37.894453 °	37.894453 °	
			-121.329232 °	-121.329232 °	
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:18320 DS_ID:20626 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Small leak in pipe on LS slope and pipe slightly crushed on LS toe. FIELD_STRUCT_DESC: 9-inch steel stormdrain pipe through the levee 3.0 feet below the crown, pump in drain ditch on the landward side. Siphon breaker on the waterward slope. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

LM Start	4.52	Rating **	M	Issue No.	102
LM End	4.52	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.892368 °	37.892368 °
				-121.328200 °	-121.328200 °
DWR ID	DWR_RD0524_01_s_2012_102				
Action/Comments					
Prunings					

Photo 1 of 1 : SP_2015_RD0524_107_102_20150309_00105.jpg



Looking southeast at dead tree on waterside slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.53	Rating **	U	Issue No.	79
LM End	4.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID	DWR_RD0524_01_s _ 2015_79				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2014 Site ID:RD0524U01RM45.07]					

Photo 1 of 1 : SP_2015_RD0524_107_79_20150309_00091.jpg



Downstream view of the erosion site.

LM Start	4.60	Rating **	M	Issue No.	66
LM End	4.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.891365 °	37.891365 °
				-121.328633 °	-121.328633 °
DWR ID	DWR_RD0524_01_s _ 2012_66				
Action/Comments					
Garbage					

Photo 1 of 1 : SP_2015_RD0524_107_66_20150309_00081.jpg



Garbage at landward toe next to ramp at LM 4.64

LM Start	4.61	Rating **	M	Issue No.	63
LM End	4.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.891285 °	37.891285 °
				-121.328728 °	-121.328728 °
DWR ID	DWR_RD0524_01_s _ 2012_63				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_63_20150309_00080.jpg



Looking south at dense trees on landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.63	Rating **	A/W	Issue No.	113
LM End	4.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890973 °	37.890973 °
				-121.328970 °	-121.328970 °
DWR ID	DWR_RD0524_01_s _ 2012_113				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_113_20150309_00117.jpg



Looking north at dense trees on landside slope.

LM Start	4.70	Rating **	A/W	Issue No.	67
LM End	4.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890108 °	37.890108 °
				-121.329523 °	-121.329523 °
DWR ID	DWR_RD0524_01_s _ 2012_67				
Action/Comments					
Trim trees to at least five feet above ground level.					
Inspector Comments: Fig tree at landside toe.					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.73	Rating **	M	Issue No.	960
LM End	4.73	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.890313 °	37.890313 °
				-121.329405 °	-121.329405 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: FS_ID:18323 DS_ID:20646 EP_NO: 0 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Good candidate for video inspection as brick and mortar deteriorating inside tunnel. FIELD_STRUCT_DESC: 22-inch concrete pipe through the levee 12.0 feet below the crown. Pump on pier at WS toe. 16-inch pipe from pump discharges into a concrete riser inside the pumphouse on the WS shoulder. Brick and mortar channel on LS toe. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

LM Start	4.90	Rating **	U	Issue No.	84
LM End	4.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.887655 °	37.887277 °
				-121.331202 °	-121.331609 °
DWR ID	DWR_RD0524_01_s_2012_84				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_84_20150424_00231.jpg



Looking northeast at untrimmed trees on landward slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	4.94	Rating **	M	Issue No.	961
LM End	4.94	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.887694 °	37.887694 °
				-121.331019 °	-121.331019 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22728 DS_ID:20628 EP_NO: 3817 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Appears abandoned and if so should be done so properly. FIELD_STRUCT_DESC: 6-inch steel pipe through the levee 3.0 feet below the crown, pump 120-feet off the LS toe. Siphon breaker in 24-inch CMP on the waterward shoulder (Permit No. 3817) Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	4.96	Rating **	M	Issue No.	114
LM End	4.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.886907 °	37.886673 °
				-121.331862 °	-121.331965 °
DWR ID	DWR_RD0524_01_s_2012_114				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	5.05	Rating **	M	Issue No.	71
LM End	5.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.885613 °	37.885286 °
				-121.332139 °	-121.332167 °
DWR ID	DWR_RD0524_01_s_2012_71				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_71_20150424_00232.jpg



Looking south at untrimmed trees on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.07	Rating **	U	Issue No.	68
LM End	5.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.885400 °	37.885400 °
				-121.332153 °	-121.332153 °
DWR ID	DWR_RD0524_01_s _ 2012_68				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_68_20150309_00082.jpg



Looking south at overhanging trees.

LM Start	5.12	Rating **	M	Issue No.	188
LM End	5.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.884627 °	37.884627 °
				-121.332172 °	-121.332172 °
DWR ID	DWR_RD0524_01_s _ 2014_188				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.16	Rating **	A/W	Issue No.	72
LM End	5.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.884075 °	37.884075 °
				-121.332118 °	-121.332118 °
DWR ID	DWR_RD0524_01_s _ 2012_72				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.19	Rating **	M	Issue No.	115
LM End	5.19	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.883587 °	37.883587 °
				-121.332100 °	-121.332100 °
DWR ID	DWR_RD0524_01_s_2012_115				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comments: Vehicle traffic created a ramp on landward slope.					

Photo 1 of 1 : SP_2015_RD0524_107_115_20150309_00118.jpg



Looking northwest at slope damage on landward slope.

LM Start	5.22	Rating **	M	Issue No.	116
LM End	5.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.883170 °	37.883170 °
				-121.332227 °	-121.332227 °
DWR ID	DWR_RD0524_01_s_2012_116				
Action/Comments					
Tree or limb					
Inspector Comments: Dead tree limbs on waterside slope.					

No Photos

LM Start	5.28	Rating **	M	Issue No.	85
LM End	5.34	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.882377 °	37.881498 °
				-121.332598 °	-121.332800 °
DWR ID	DWR_RD0524_01_s_2012_85				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_85_20150424_00233.jpg



Looking south at untrimmed trees on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.38	Rating **	M	Issue No.	932
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880945 °	37.880522 °
				-121.332837 °	-121.332918 °
DWR ID	DWR_RD0524_01_s _ 2012_932				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_932_20150424_00234.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	5.39	Rating **	M	Issue No.	178
LM End	5.39	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880806 °	37.880806 °
				-121.332833 °	-121.332833 °
DWR ID	DWR_RD0524_01_f _ 2014_178				
Action/Comments					
Tree or limb					
Inspector Comments: Downed tree on landward toe.					

Photo 1 of 1 : SP_2015_RD0524_107_178_20150309_00145.jpg



Looking south at downed tree on landward slope.

LM Start	5.41	Rating **	A/W	Issue No.	931
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.880575 °	37.880575 °
				-121.332890 °	-121.332890 °
DWR ID	DWR_RD0524_01_s _ 2012_931				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: LMA grouted rodent holes.					

Photo 1 of 2 : SP_2015_RD0524_107_931_20150309_00169.jpg



Looking north at typical view of grouted rodent holes on landward shoulder and slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.41	Rating **	A/W	Issue No.	931 (cont)
LM End	5.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.880575 °	37.880575 °
				-121.332890 °	-121.332890 °
DWR ID	DWR_RD0524_01_s_2012_931				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: LMA grouted rodent holes.					

Photo 2 of 2 : SP_2015_RD0524_107_931_20150309_00170.jpg



Looking north at typical view of grouted rodent holes on waterward slope.

LM Start	5.42	Rating **	M	Issue No.	118
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323 °	37.880323 °
				-121.332968 °	-121.332968 °
DWR ID	DWR_RD0524_01_s_2012_118				
Action/Comments					
Repair slope instability.					
Inspector Comments: Slope damage caused by human activity.					

Photo 1 of 3 : SP_2015_RD0524_107_118_20150309_00119.jpg



Looking west at slope damage on landside slope.

LM Start	5.42	Rating **	M	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : SP_2015_RD0524_107_118_20150309_00120.jpg



Looking southeast at damaged slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.42	Rating **	M	Issue No.	118 (cont)
LM End	5.42	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323 °	37.880323 °
				-121.332968 °	-121.332968 °
DWR ID	DWR_RD0524_01_s _ 2012_118				
Action/Comments					
Repair slope instability.					
Inspector Comments: Slope damage caused by human activity.					

Photo 3 of 3 : SP_2015_RD0524_107_118_20150309_00121.jpg



Looking east at slope caving on landside slope.

LM Start	5.43	Rating **	U	Issue No.	125
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.880320 °	37.880320 °
				-121.333266 °	-121.333266 °
DWR ID	DWR_RD0524_01_s _ 2015_125				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion seems to be getting worse. More material sloughing visible. 08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2014 Site ID:RD0524U01RM45.97]					

Photo 1 of 1 : SP_2015_RD0524_107_125_20150309_00126.jpg



Close view of the erosion and the pipe.

LM Start	5.44	Rating **	M	Issue No.	73
LM End	5.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880085 °	37.880085 °
				-121.333045 °	-121.333045 °
DWR ID	DWR_RD0524_01_s _ 2012_73				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_73_20150424_00235.jpg



Looking east at untrimmed trees on landward slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.45	Rating **	M	Issue No.	189
LM End	5.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.879998 °	37.879998 °
				-121.333079 °	-121.333079 °
DWR ID	DWR_RD0524_01_s_2014_189				
Action/Comments					
Prunings Inspector Comments: Prunings on landward shoulder should be removed.					

No Photos

LM Start	5.46	Rating **	U	Issue No.	962
LM End	5.46	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.880584 °	37.880584 °
				-121.332901 °	-121.332901 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18345 DS_ID:20630 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: flap gate damage and does not work at WS toe. Large hole in pipe at WS toe. Pipe appears abandoned and should be done so properly. FIELD_STRUCT_DESC: 1 of 2: 12-inch pipe through the levee 6.0-feet below the crown, pump missing from the landward side. Flap gate on the waterward end. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.47	Rating **	M	Issue No.	963
LM End	5.47	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.880358 °	37.880358 °
				-121.332972 °	-121.332972 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18348 DS_ID:20631 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Recent work being done on WS slope. Pipe may still be in use. FIELD_STRUCT_DESC: 10-inch steel storm drain pipe through the levee 6.0 feet below the crown. Pump not found on LS. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	5.52	Rating **	A/W	Issue No.	96
LM End	5.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.878918 °	37.878918 °
				-121.333148 °	-121.333148 °
DWR ID	DWR_RD0524_01_s _ 2012_96				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.53	Rating **	M	Issue No.	126
LM End	5.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920 °	37.878920 °
				-121.332670 °	-121.332670 °
DWR ID	DWR_RD0524_01_s _ 2015_126				
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2014 Site ID:RD0524U01RM46.06]					

Photo 1 of 1 : SP_2015_RD0524_107_126_20150309_00127.jpg



Front view of the erosion.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.64	Rating **	A/W	Issue No.	69
LM End	5.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.877298 °	37.875073 °
				-121.332343 °	-121.333168 °
DWR ID	DWR_RD0524_01_s _ 2012_69				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comments: District has grouted rodent holes.					

No Photos

LM Start	5.64	Rating **	M	Issue No.	117
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.877272 °	37.877272 °
				-121.332400 °	-121.332400 °
DWR ID	DWR_RD0524_01_f _ 2013_117				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.77	Rating **	M	Issue No.	196
LM End	5.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.875510 °	37.875510 °
				-121.332953 °	-121.332953 °
DWR ID	DWR_RD0524_01_s _ 2015_196				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.79	Rating **	M	Issue No.	267
LM End	5.79	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.875328 °	37.875328 °
				-121.333050 °	-121.333050 °
DWR ID	DWR_RD0524_01_s_2012_267				
Action/Comments					
Prunings					
Inspector Comments: Prunings at landside toe should be burned or removed.					

Photo 1 of 1 : SP_2015_RD0524_107_267_20150424_00236.jpg



Looking east at pruning piles at landward toe and berm.

LM Start	5.79	Rating **	M	Issue No.	197
LM End	5.79	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.875310 °	37.875310 °
				-121.333065 °	-121.333065 °
DWR ID	DWR_RD0524_01_s_2015_197				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Several rodent holes on landward slope and levee crown.					

Photo 1 of 2 : SP_2015_RD0524_107_197_20150424_00237.jpg



Looking north at typical view of rodent holes on landward slope.

LM Start	5.79	Rating **	M	Issue No.	197 (cont)
LM End	5.79	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : SP_2015_RD0524_107_197_20150424_00238.jpg



Looking southwest at typical view of rodent hole at landward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.79	Rating **	M	Issue No.	964
LM End	5.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.876001 °	37.876001 °
				-121.332725 °	-121.332725 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:40793 DS_ID:20635 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Appears abandoned and if so should be done so					

No Photos

LM Start	5.79	Rating **	M	Issue No.	965
LM End	5.79	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.876001 °	37.876001 °
				-121.332725 °	-121.332725 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18364 DS_ID:20649 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: 2.25-inch steel conduit for a 1-inch plastic electrical conduit through the levee 0.25-feet below the crown. Lines exposed on both slopes. FS Date: 08/23/2013					

No Photos

LM Start	5.81	Rating **	U	Issue No.	198
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Erosion Areas			37.874950 °	37.874950 °
				-121.333273 °	-121.333273 °
DWR ID	DWR_RD0524_01_s_2015_198				
Action/Comments					
Inspector Comments: Large erosion around irrigation pipe on waterward slope.					

Photo 1 of 3 : SP_2015_RD0524_107_198_20150424_00239.jpg



Looking south at erosion around irrigation pipe on waterward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.81	Rating **	U	Issue No.	198 (cont)
LM End	5.81	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Erosion Areas			37.874950 °	37.874950 °
				-121.333273 °	-121.333273 °
DWR ID	DWR_RD0524_01_s _ 2015_198				
Action/Comments					
Inspector Comments: Large erosion around irrigation pipe on waterward slope.					

Photo 2 of 3 : SP_2015_RD0524_107_198_20150424_00240.jpg



Looking east at erosion around irrigation pipe.

LM Start	5.81	Rating **	U	Issue No.	198 (cont)
LM End	5.81	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2015_RD0524_107_198_20150424_00241.jpg



Looking at erosion around pipe inside concrete collar.

LM Start	5.86	Rating **	U	Issue No.	128
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID	DWR_RD0524_01_s _ 2015_128				
Action/Comments					
Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2014 Site ID:RD0524U01RM46.39]					

Photo 1 of 1 : SP_2015_RD0524_107_128_20150309_00128.jpg



Front view of the site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.86	Rating **	M	Issue No.	75
LM End	5.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.874240 °	37.874002 °
				-121.333187 °	-121.333027 °
DWR ID	DWR_RD0524_01_s _ 2012_75				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows. Inspector Comments: District has grouted rodent holes, but other rodent holes have appeared.					

Photo 1 of 2 : SP_2015_RD0524_107_75_20150309_00086.jpg



Looking typical view of several rodent holes on landward slope and toe.

Photo 2 of 2 : SP_2015_RD0524_107_75_20150309_00087.jpg



Looking southwest at typical rodent holes on waterward slope.

LM Start	5.86	Rating **	M	Issue No.	74
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874240 °	37.874165 °
				-121.333185 °	-121.333155 °
DWR ID	DWR_RD0524_01_s _ 2012_74				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Erosion on landward slope around intake pipe.					

Photo 1 of 3 : SP_2015_RD0524_107_74_20150309_00083.jpg



Looking southeast at erosion around pipe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.86	Rating **	M	Issue No.	74 (cont)
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874240 °	37.874165 °
				-121.333185 °	-121.333155 °
DWR ID	DWR_RD0524_01_s_2012_74				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Erosion on landward slope around intake pipe.					

Photo 2 of 3 : SP_2015_RD0524_107_74_20150309_00084.jpg



Looking west at erosion around intake pipe on landward slope.

Photo 3 of 3 : SP_2015_RD0524_107_74_20150309_00085.jpg



Erosion at waterward toe and around irrigation pipe at LM 5.92

LM Start	5.87	Rating **	C	Issue No.	190
LM End	5.87	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.874197 °	37.874197 °
				-121.333208 °	-121.333208 °
DWR ID	DWR_RD0524_01_s _ 2014_190				
Action/Comments					
Pipe					
Inspector Comments: Landowner is replacing pump and left old pipe on waterward shoulder.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.87	Rating **	M	Issue No.	966
LM End	5.87	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874972 °	37.874972 °
				-121.333246 °	-121.333246 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18369 DS_ID:20636 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Apparent leak on WS shoulder at concrete riser. Erosion under pipe. This may have been fixed when the pipe was sleeved with a PVC liner. FIELD_STRUCT_DESC: 10-inch steel storm drain pipe through the levee 5.0 feet below the crown. Pump on the landward side. Siphon breaker in a 36-inch concrete riser on the waterward shoulder. Power pole at the landward toe. PVC liner sleeved inside steel pipe. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	5.88	Rating **	M	Issue No.	967
LM End	5.88	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874829 °	37.874829 °
				-121.333265 °	-121.333265 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18705					
DS_ID:20656					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: Need to verify gasline exists and if so improve signage.					
FIELD_STRUCT_DESC: Gasline marker sign on WS shoulder.					
FS Date: 08/23/2013					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.89	Rating **	U	Issue No.	119
LM End	5.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873893 °	37.873893 °
				-121.332978 °	-121.332978 °
DWR ID	DWR_RD0524_01_s _ 2012_119				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comments: Landowner is using damaged area as a ramp.					

Photo 1 of 2 : SP_2015_RD0524_107_119_20150309_00122.jpg



Looking west at unauthorized ramp and landside slope damage.

Photo 2 of 2 : SP_2015_RD0524_107_119_20150309_00123.jpg



Looking southwest at damaged slope and ramp on landside slope.

LM Start	5.89	Rating **	U	Issue No.	119 (cont)
LM End	5.89	Issue Type +	Ma	Location *	LS

LM Start	5.92	Rating **	M	Issue No.	86
LM End	5.92	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873678 °	37.873678 °
				-121.332550 °	-121.332550 °
DWR ID	DWR_RD0524_01_s _ 2012_86				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.92	Rating **	M	Issue No.	968
LM End	5.92	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.874194 °	37.874194 °
				-121.333182 °	-121.333182 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18379 DS_ID:20638 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy erosion around pipe upstream of standpipe on LS slope. Verify pipe is not leaking and repair erosion on LS slope. FIELD_STRUCT_DESC: 12-inch steel irrigation pipe through the levee 10.0 feet below the crown. Slant pump on pier at WS toe. 10-inch steel standpipe on LS slope. 42-inch concrete standpipe on LS slope. Filter plant, and power pole on LS toe. 1.5-inch galvanized iron electrical conduit at same location. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	5.94	Rating **	M	Issue No.	87
LM End	5.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.873545 °	37.873445 °
				-121.332308 °	-121.332127 °
DWR ID	DWR_RD0524_01_s _ 2012_87				
Action/Comments					
Fence					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	5.94	Rating **	U	Issue No.	88
LM End	5.95	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.873543 °	37.873445 °
				-121.332308 °	-121.332127 °
DWR ID	DWR_RD0524_01_s _ 2012_88				
Action/Comments					
Landscaping Inspector Comments: Cactus and Century plants on landward slope and toe.					

Photo 1 of 1 : SP_2015_RD0524_107_88_20150309_00095.jpg



Looking southeast at fence and cactus on landside slope and toe.

LM Start	5.96	Rating **	M	Issue No.	120
LM End	5.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873347 °	37.873347 °
				-121.332028 °	-121.332028 °
DWR ID	DWR_RD0524_01_s _ 2012_120				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_120_20150424_00242.jpg



Looking south at untrimmed trees on landward slope and toe.

LM Start	6.00	Rating **	M	Issue No.	933
LM End	6.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873047 °	37.873047 °
				-121.331408 °	-121.331408 °
DWR ID	DWR_RD0524_01_s _ 2012_933				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Landowner cut steps into landside slope.					

Photo 1 of 1 : SP_2015_RD0524_107_933_20150309_00171.jpg



Looking north at steps cut into landward slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	6.02	Rating **	M	Issue No.	191
LM End	6.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.872844 °	37.872844 °
				-121.331070 °	-121.331070 °
DWR ID	DWR_RD0524_01_s _ 2014_191				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Cactus at landward toe.					

No Photos

LM Start	6.15	Rating **	M	Issue No.	268
LM End	6.15	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871137 °	37.871137 °
				-121.330138 °	-121.330138 °
DWR ID	DWR_RD0524_01_s _ 2012_268				
Action/Comments					
Pipe					
Inspector Comments: Open abandoned 10" pipe on waterside slope below flood elevation. Pipe should be removed or properly abandoned.					

Photo 1 of 1 : SP_2015_RD0524_107_268_20150309_00163.jpg



Looking southeast at abandoned pipe on waterside slope.

LM Start	6.15	Rating **	U	Issue No.	81
LM End	6.15	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871097 °	37.871097 °
				-121.330100 °	-121.330100 °
DWR ID	DWR_RD0524_01_s _ 2015_81				
Action/Comments					
Tree or limb Inspector Comments: Large tree fallen across levee crown blocking access.					

Photo 1 of 2 : SP_2015_RD0524_107_81_20150424_00243.jpg



Looking southwest at large tree across levee crown.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	6.15	Rating **	U	Issue No.	81 (cont)	
LM End	6.15	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			37.871097 °		37.871097 °
				-121.330100 °		-121.330100 °
DWR ID	DWR_RD0524_01_s _ 2015_81					
Action/Comments						
Tree or limb						
Inspector Comments: Large tree fallen across levee crown blocking access.						

Photo 2 of 2 : SP_2015_RD0524_107_81_20150424_00244.jpg



Looking south at large tree across levee crown.

LM Start	6.17	Rating **	M	Issue No.	98
LM End	6.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.870842 °	37.870842 °
				-121.330000 °	-121.330000 °
DWR ID	DWR_RD0524_01_s _ 2012_98				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : SP_2015_RD0524_107_98_20150424_00245.jpg



Looking southeast at untrimmed trees at landward toe.

LM Start	6.17	Rating **	A/W	Issue No.	97
LM End	6.17	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.870840 °	37.870840 °
				-121.329993 °	-121.329993 °
DWR ID	DWR_RD0524_01_s _ 2012_97				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2015

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	04/21/2015 04/21/2015	Richard Willoughby

LM Start	6.21	Rating **	M	Issue No.	969
LM End	6.21	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871138 °	37.871138 °
				-121.330146 °	-121.330146 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:18392 DS_ID:20641 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe and pump abandoned and should be done so properly. FIELD_STRUCT_DESC: *ABANDONED*10-inch pipe through levee 12.0 feet below crown, pump on the waterward slope. Originally included in the 1964 O&M manual. FS Date: 08/23/2013					

No Photos

LM Start	6.21	Rating **	M	Issue No.	970
LM End	6.21	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.871118 °	37.871118 °
				-121.330137 °	-121.330137 °
DWR ID					
Action/Comments					
Inspector Comments: FS_ID:22073 DS_ID:24052 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Abandoned and should be done so properly. FIELD_STRUCT_DESC: *ABANDONED* 1.75-inch galvanized iron electrical conduit through the levee 1-foot below the crown. Power pole on LS toe. FS Date: 08/23/2013					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	